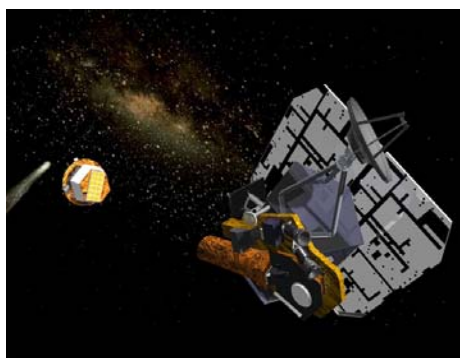


Jan. 8 is tentative launch date for Deep Impact



▲ **ELV Update:** A decision has been made to reschedule the launch of the Deep Impact spacecraft to no earlier than Jan. 8 to allow more time for evaluation of mission software. While there are no significant problems associated with the spacecraft hardware, additional time is necessary to be ready for launch. Spacecraft functional and mission readiness tests continue.

The stacking of the Boeing Delta II launch vehicle on Pad 17-B began Nov. 22 with the hoisting of the first stage into the launcher, followed by the nine strap-on Solid Rocket Boosters, in sets of three. That work continues this week. The second stage will be hoisted into position atop the first stage Friday.

The overall Deep Impact mission management for this Discovery class program is conducted by the University of Maryland in College Park, Md. The Deep Impact project management is handled by the Jet Propulsion Laboratory in Pasadena,

Calif. The spacecraft was built for NASA by Ball Aerospace and Technologies Corporation.

▲ **ISS Update:** Last week, the crew began preparations for the undocking of the Progress cargo craft attached to the Station. The crew reinstalled a docking mechanism on the resupply vehicle, which will be undocked from the complex and deorbited a few days before Christmas.

Monday, Flight Engineer Salizhan Sharipov, the Soyuz commander, and Expedition 10 Commander and NASA Science Officer Leroy Chiao undocked the Soyuz from a port on the Station's Pirs Docking Compartment. They backed away to a distance of about 98 feet and then moved laterally about 45 feet along the Station to briefly hold position facing the nadir docking port on the complex's Zarya module. The crew then rotated the craft to align with the new docking port, and guided the Soyuz in for its redocking at Zarya.

The move clears Pirs for use as an airlock from which Sharipov and Chiao will conduct two Russian spacewalks early next year.

■ **NASA Exchange** — Employees can receive a 25 percent discount on all memorabilia (excluding 14K gold jewelry and Add-A-Link bracelets and charms) and all wearable items purchased Dec. 1-23.



Discounts will be taken at the register and quantities are limited!

■ **Education Opportunity** — The University of Miami (Cape Canaveral Programs) is accepting applications for the Master of Science in Management of Technology (MSMOT) and Master of Science in Industrial Engineering (MSIE) degree programs that start in the spring of 2005. Both programs will be taught in Cape Canaveral. Courses are held Friday evenings and Saturdays to accommodate working professionals. For more information and to receive an application and brochure, please call Augusto Roca, program administrator, at 305-284-4100 or e-mail augusto@miami.edu.

■ **NASA Science** — Tiny sensors, shaped like tumbleweed and small enough to fit inside a blood vessel, might one day ride to space inside astronauts' bodies, warning the space travelers when radiation is damaging their cells. This new technology, being developed by NASA-supported researchers, would improve health care on Earth, too. Go to http://science.nasa.gov/headlines/y2004/28oct_nanosensors.htm?list550276 to read the full story.

■ **Did You Know?** Hanukkah begins at sundown Dec. 7. The eight-day Jewish holiday commemorates the rededication of the Temple of Jerusalem after its defilement by Antiochus of Syria.